

## **FINDING OF NO SIGNIFICANT IMPACTS**

### **Gravel Acquisition Plan for Denali National Park and Preserve, Alaska**

The National Park Service (NPS) has prepared an environmental assessment (EA) to evaluate a plan to develop and use up to 375,000 cubic yards (CY) of mineral materials (rock, gravel, and sand) over the next ten years for road and other construction and maintenance projects along the Denali Park Road. The purpose of the gravel acquisition plan (GAP) is to update the 1992 Borrow Use Management Plan, which was intended to provide maintenance material for 10 years, and to address new project needs identified in the 1996 Denali Entrance Area and Road Corridor Environmental Impact Statement (Front Country EIS.) The NPS action will authorize extraction and processing of up to 293,000 CY of mineral materials from within the park over the next ten years. Any remaining needs using park resources will be addressed under the National Environmental Policy Act or imported from external sources. This plan implements a slightly modified version of phase 1 of the NPS/environmentally preferred alternative.

#### **Public Involvement**

The NPS released the GAP EA on May 27, 2003, for a 30-day public review and comment period. This review period was extended to July 7, 2003, pursuant to a request by a public interest group. Fifty copies of the EA were mailed to stakeholders and local libraries or made available at park visitor centers. The EA was also available on the Denali Park website at [www.nps.gov/dena](http://www.nps.gov/dena). The NPS received 15 comment letters or comment sheets from non-governmental organizations, commercial operators, private landowners, and individuals. Most of the comments addressed mineral material needs at the western end of the Denali Park Road and source sites in the Kantishna area. No comments were received from federal, state, or local governmental agencies. The commenters raised the following major concerns, which are addressed in more detail in the attached errata and NPS responses to comments (attachment A.)

1. The gravel plan should seek a sustainable approach to gravel needs by specifying: replenishable sites, greater use of external sources, construction and maintenance techniques to minimize source needs, and vehicle size limits to reduce damage to road surfaces.
2. For various reasons, the North Face Corner and Moose Creek Terrace sites should be removed from further consideration.
3. The NPS should implement a previous decision to reclaim the North Face Corner site.
4. The NPS should work with Kantishna area stakeholders to identify sites at the western end of the park road that are consistent with NPS site selection or screening criteria, including the Forest View site.

## **Alternatives**

The EA evaluated 5 alternatives as described below:

Alternative 1 - No-Action Alternative: This alternative would result in continued use of the approved material extraction sites at Teklanika Pit and Toklat River at the extraction rates approved in the 1992 Borrow Use Management Plan. It would also include the minimal extraction remaining at the North Face Corner to facilitate reclamation of that site and completion of a bus turnaround and visitor rest stop. All mineral material needs beyond the volume that could be supplied by the in-park resources would need to be imported from external sources.

Alternative 2 – Maximum Flexibility/Short Hauls: This alternative would result in authorization to extract mineral material from up to 8 sites and use of the North Face Corner for processing and stockpiling until reclamation at a future date. The 8 extraction sites would be Teklanika Pit, East Fork River, Toklat River, Beaver Pond, Boundary, Camp Ridge, Downtown Kantishna, and Kantishna Airstrip.

Alternative 3 – Minimum Visual Intrusion/Long Hauls: This alternative would result in the development of one new major extraction site at the western end of the park road in addition to Teklanika Pit and Toklat River, namely the Moose Creek Terrace site. Use of external sources would be emphasized for the first four park road segments. The NPS would enter into agreements with ADOT, the Alaska Railroad, or AHTNA Corporation to secure long-term use of material sites along the George Parks Highway. Teklanika Pit would be used primarily for stockpiling of external source material, and for minimal extraction and screening for road surfacing material only. All of these sites are distant or shielded from view of the visiting public on the Denali Park Road.

Alternative 4 – Phased Developments with Moderate Number of Sites (*NPS Preferred*): This alternative would authorize use of 5 extraction sites at any one time, including phased development at the western end of the park road, as needed. Sites in this alternative would include Teklanika Pit, East Fork River, Toklat River, Beaver Pond, Downtown Kantishna, and Moose Creek Terrace. The first phase would involve the extraction of material at Downtown Kantishna, with the goal to reclaim those former mining claims. The Moose Creek Terrace site would be developed only after Downtown Kantishna was exhausted and material was needed for projects at the western end of the park road.

Alternative 5 – Economic Alternative with Moderate Hauls (*NPS Preferred*): This alternative would be similar to alternative 4, except in phase 2 the North Face Corner site would be developed after Downtown Kantishna was exhausted and material was needed for projects at the western end of the park road.

## **Alternatives Considered but Eliminated from Further Consideration**

Two alternatives were considered but eliminated from further consideration in this EA.

1. Use only external gravel sources, and

2. Reduce long-term gravel needs with the use of new road surface technologies like chip-seal or hi-float.

A cost analysis was conducted, which showed the break-even point for purchasing and hauling gravel from external sources to the park road is near the Savage Bridge, plus or minus a couple of miles, due to truck-hauling costs and depending on the size and ownership of the gravel trucks. Therefore, using external sources to haul gravel beyond the Savage River Bridge becomes increasingly more expensive as trucks travel westward on the park road. In addition there would be impacts to the road surface from numerous passes by heavy gravel trucks.

Chip seal and hi-float road surfacing techniques involve the use of material other than native materials, which is inconsistent with the findings in the park road system evaluation and the desired character of the Denali Park Road beyond the Teklanika Bridge as defined in the 1996 Front Country EIS.

### **Environmentally and NPS Preferred Alternative**

The EA identifies alternatives 4 and 5 as the environmentally and NPS preferred alternatives. The two alternatives are identical except for phase 2 near the end of the 10-year period, which directs the NPS to extract gravel from either the Moose Creek Terrace (alternative 4) or North Face Corner (alternative 5.) Both alternatives provide a moderate number of sites distributed along the park road with moderate haul distances. The two sites to be considered in phase 2 are similar in size, mineral material content, and impacts to wetlands and vegetation, but vary in terms of other impacts. In the EA the NPS stated it would evaluate public comment to aid in its decision to select one or the other preferred alternative. In general the public supports the two preferred alternatives minus phase 2 to develop either the Moose Creek Terrace site or the North Face Corner site. The North Face Corner would affect more Kantishna area visitors and their viewshed because of its location adjacent to the park road. The Moose Creek Terrace site is not adjacent to the park road but would require one-mile of upgraded road and would impact a previously undisturbed area, except for the unimproved mining access track through the area, enjoyed by local hikers and fall subsistence users.

As a result of public comment, the NPS preferred alternative is alternative 4 (or 5) in the EA minus phase 2. The NPS would not move to either the North Face Corner or Moose Creek Terrace in phase 2, but would reassess alternative sites at the western end of the park as the authorized volumes at Downtown Kantishna and Beaver Pond are exhausted in phase 1 of the plan. Other adjustments to the preferred alternative are:

- The final plan will include a slight increase in the ten-year gravel production at Beaver Pond from 19,000 CY to 20,250 CY, which was analyzed under alternative 2 and will not result in noticeable additional impacts to the area.
- There will be a reduction in the projected ten-year removal from East Fork River to about 30,000 CY from 54,000 CY because about 56 percent of the extraction area and stream channels are located outside of the Denali Wilderness. Gravel from East Fork River will be excavated to address emergencies (such as for slope

failures or washouts) and reconstruction projects in the Polychrome and Sable Pass areas. Up to 3,000 CY could be used each fall or stockpiled at the Ghiglione Bridge site near MP 42 in anticipation of these needs for the following year.

- External sources will be used for major projects along road segment 1 and for material needs along road segments 2 and 3 where economically and environmentally advantageous. Gravel from Teklanika Pit will be used primarily for maintenance surfacing, including a small amount for trail surfacing along segment one. Gravel excavation from Teklanika Pit would be authorized for a maximum of 73,250 CY, but because about 77,750 CY are estimated as needed along the first three road segments, including segment 1 from the entrance area to Savage Bridge, it is highly likely less than the authorized 73,250 CY will be extracted from Teklanika Pit.
- Because some of the unidentified future FHWA road re-construction projects requiring up to 70,000 CY of material may occur along the first three road segments, it is likely that a large portion of these estimated gravel needs would be imported from external sources. Depending on economic considerations and the total 10-year gravel needs along the first three road segments, as little as 5,000 CY or as much as 121,000 CY of gravel may be imported from external sources. Furthermore, external source material will be stockpiled in the Teklanika Pit during the shoulder seasons in fall and spring in anticipation for the summer seasonal needs to reduce adverse impacts to park visitors and to extend the life of the Teklanika Pit.

### **Mitigation**

The NPS will use the following measures to mitigate impacts from the final decision.

- External source sites will be used for mineral materials along the first three road segments (to mile 37) where it is economically and environmentally preferable to do so, and large volumes will be stockpiled near project sites during the shoulder seasons, when feasible, to avoid impacts to park visitors along the park road.
- Topsoil and overburden will be stockpiled adjacent to or close to extraction areas and used to reclaim used parts of borrow sites.
- Sites will be designed so that site restoration of the extraction area will blend in with the surrounding terrain to the maximum extent possible, and return natural functions and processes to the sites.
- Mirror channels in river floodplains will be reclaimed by natural water flows and unrecognizable within 5 years of extraction.
- Silt fences and other devices will be used to control sediment input into streams, rivers and other water bodies to protect water quality and aquatic habitat.
- Dust palliatives will be applied to the park road to reduce dust and the rate of surface material loss, especially fines, which will reduce maintenance requirements.
- Wetlands impacts will be compensated for on an acre for acre basis, at a minimum. Compensation will occur on mining claims in the Kantishna area recently obtained by the NPS that need reclamation.

- Screening and crushing will be conducted, to the extent possible, during shoulder seasons to minimize noise impacts on park visitors and wildlife.
- The NPS will reclaim up to 65 acres of previously disturbed area, including the 55-acres on the Downtown Kantishna site and several small to medium-sized former extraction sites. These sites are described in attachment B.

### **Environmental Consequences of the NPS Preferred Alternative**

Phase 1 of the preferred alternative, as modified above, will result in the disturbance of up to 44.6 acres of surface area, including the Downtown Kantishna area. This alternative will result in the disturbance of up to 8.4 acres of wetlands, including 5.6 acres of seasonally flooded gravelly floodplains in the East Fork and Toklat Rivers. By eliminating the North Face Corner and Moose Creek Terrace sites, the impacts to visitor use and wetlands will be reduced to minor impacts from moderate impacts.

The impacts to other park resources and values are detailed in the EA and will be as follows. Effects will be negligible or minor to air quality, hydrology, water quality, aquatic resources, wildlife and habitat, cultural resources, local economy, subsistence uses, and wilderness values. The overall impacts to geologic resources will be moderate because up to 293,000 CY of mineral material could be removed from finite supplies in the wilderness exclusion zone along the road corridor, of which 153,000 CY is not renewable. Importation of mineral materials from external sources to the first three road segments could result in moderate impacts on visitor use and enjoyment and park management because of increased dust, noise, and road damage. Environmental considerations and available funding for projects along the first three road segments would affect how much material could be imported from external sources. This material could be hauled during the shoulder seasons to minimize impacts to park visitors. Impacts to scenic integrity along the park road would remain at a moderate level because the five extraction and processing sites and associated activities would be visible for several years along 8.4 miles of the park road. The removal of the North Face Corner site and Moose Creek Terrace site would reduce the overall visible length of extraction area along the park road by less than one mile, but the adverse effects on the scenery for visitors in the Kantishna area would be dramatically reduced.

The cumulative effects to the above park resources and values would be minor to moderate when added to previous and projected park developments, mining-related impacts, and private developments along the park road corridor.

### **Decision**

The NPS will implement a slightly modified version of phase 1 of the preferred alternatives (4 and 5) described in the EA, and phase 2 to extract and process mineral material at either at the North Face Corner or Moose Creek Terrace will be withdrawn. The final plan calls for development and use of up to 292,500 CY of mineral materials from up to 5 sites along the park road in addition to importing up to 121,000 CY of

gravel from external sources over the next ten years. The final plan involves the following elements.

- Five source sites in the park with their associated maximum estimated extraction volumes will be Teklanika Pit (73,250 CY), East Fork River (30,000 CY and excluding the area in designated wilderness), Toklat River (110,000 CY), Beaver Pond (20,250 CY), and Downtown Kantishna (59,000 CY).
- The NPS will complete restoration of the North Face Corner area as soon as possible, including realignment of the Denali Park Road right-of-way and completion of a bus stop and visitor rest stop at this location.
- The NPS will maximize its extraction from the Downtown Kantishna site while restoring the natural functions of the area.
- The NPS will evaluate other potential material sites along the park road for the next planning period. Sites to be evaluated within the next ten years may include Old Teklanika Pit, Forest View, Boundary, Kantishna Airstrip, Friday Creek, Moose Creek Terrace, North Face Corner, Camp Ridge, and other locations north of the Kantishna Airstrip. Such evaluations will include consultations with Kantishna area stakeholders and site testing for materials quality and potential wetlands impacts, where not already conducted. Site testing will include separate NEPA compliance where required.
- The NPS will extend the application of dust palliatives where environmentally safe to reduce dust and to preserve road surface materials. The NPS will study the effectiveness of dust palliatives in conserving road surface materials.
- The NPS will reconsider alternative road construction and surfacing techniques to conserve mineral materials, such as chip seal or hi-float.
- Primary mineral materials stockpile sites will be Teklanika Pit, Ghiglione Bridge, Toklat Road Camp, Beaver Pond, and Downtown Kantishna.
- The mitigation measures noted above will be followed over the next ten years, including the reclamation of former extraction sites that are no longer needed and restoration of at least 8.4 acres of wetlands in the Kantishna Hills to compensate for wetlands lost from site developments.

### **Rationale for the Decision**

The decision will provide the NPS, its contractors, and the State-owned segment of the Denali Park Road with adequate gravel sources from along the Denali Park Road to complete projects specified in the 1996 Front Country EIS and to maintain the park road in a condition that is consistent with the road character analysis and safety requirements. This decision is responsive to public comments and provides flexibility to address projected construction and maintenance needs over the next decade. Though this decision will result in the extraction of up to 292,500 CY of mineral material from the park and the disturbance of up to 44.6 acres (including 42 acres at Downtown Kantishna), up to 65 acres of formerly disturbed acres will be restored (including up to 55 acres at Downtown Kantishna.) This decision will result in the disturbance of up to 8.4 acres of wetlands, including 5.6 acres of seasonally flooded gravelly floodplains in the East Fork and Toklat Rivers. This decision addresses NPS policies to avoid wetlands where feasible and compensate for wetlands damages on an acre for acre basis. This decision allows for the

evaluation of alternative construction and maintenance techniques and future potential mineral material source sites along the Denali Park Road corridor. As summarized above, this decision will result in negligible to minor impacts to most affected resources and moderate impacts to available gravel sources, scenic integrity along the park road, and visitor use depending on how much and when external gravel is imported into the park. The action will not result in the impairment of those resources that fulfill the specific purposes identified in the establishing legislation for the park or that are key to the natural and cultural integrity of the park and preserve.

This action complies with the Endangered Species Act, the National Historic Preservation Act, and Executive Orders 11988, 11900, and 12898. There will be no significant restriction of subsistence activities as documented by the ANILCA Title VIII, Section 810(a) summary evaluation and findings.

I find the decision does not constitute a major federal action significantly affecting the quality of the human environment. Therefore, in accordance with the National Environmental Policy Act of 1969 and regulations of the Council of Environmental Quality (40 CFR 1508.9), and environmental impact statement will not be prepared for this gravel acquisition plan.

Recommended: \_\_\_\_\_  
Superintendent, Denali National Park and Preserve      Date

Approved: \_\_\_\_\_  
Regional Director, Alaska      Date

Attachment A: NPS Responses to Public Comments and Errata for GAP EA

Attachment B: Restoration Areas as Mitigation for the Denali Gravel Acquisition Plan